

Notice of Allowability

Application No.

10/609,893

Examiner

Luis Roman

Applicant(s)

KOLOMEITSEV, SERGEI F.

Art Unit

2836

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 02/12/07.
2. ☒ The allowed claim(s) is/are 1-25.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

DETAILED ACTION

Applicant's arguments, see page 3 line 15 to page 6 line 19 (Re: Final Action, Page 14) REASON I, filed 02/12/07, with respect to claims 1, 11, 18, 21, 24 & 25 have been fully considered and are persuasive. The rejection of claims 1, 11, 18, 21, 24 & 25 has been withdrawn.

Reasons for Allowance

Examiner acknowledges a submission of the amendment filled on 02/12/07. Claims 1-25 were previously presented; no claims have been amended, cancelled or added new. It also included remarks/arguments.

Arguments have overcome rejection

The following is an examiner's statement of reasons for allowance.

Claims 1, 11, 18, 21, 24 & 25 the closest references are:

- "Electric Power Stirring Apparatus" Mukai et al. US Patent 5927430 issued on July 27, 1999.
- "High Reliability Motor System" Stridsberg US Patent 6885162 issued on April 26, 2006.

These patents disclose:

- Mukai et al. discloses an automotive steering assist system comprising a DC motor (Abstract), a first sensor for generating a first sensing signal indicative of torque being applied to said steering wheel (Fig. 3 element 12); a second sensor for generating a second sensing signal indicative of a rotational position of said steering wheel (Fig. 3 element 14); a computing apparatus programmed to read said first and second sensing signals, and to generate torque assist command

signals therefrom (Fig. 3 element 20A), said torque assist command signals being directed into a torque assist channel (Fig. 3 connections coming out of element 43 and getting in element 10) and, a motor having a permanent magnet rotor and a wire wound stator, the poles being connected for receiving torque assist commands transmitted by one of said torque assist channels, and able to generate the corresponding torques (Col. 4 lines 62-67 & Col. 5 lines 1-3 & Fig. 3 element 10).

- Stridsberg teaches, two separate m-phase channels (Fig. 4 connections 404 from element 403 to element 406<three upper lines of set 404, first channel and three bottom lines of set 404, second channel>) and said stator is being provided with 2 groups of m-phase wire wound poles (Fig. 3), a motor having a permanent magnet rotor and a wire wound stator, said stator being provided with 2 groups of m-phase wire wound poles, the poles in each of said pole groups being connected for receiving torque assist commands transmitted by one of said torque assist channels, and able to generate the corresponding torques (Abstract); and a short detector for appraising said computing apparatus concerning the existence of shorts in said stator, said computer being programmed to generate control signals which switch off current to the faulty windings in which a short has been detected (Abstract).

The references do not disclose:

- The computer being programmed to generate control signals, which switch off current to the windings of all poles within any channel in which a short has been detected. In other words disabling all poles within the m-phase group of a shorted pole, which has been so detected.

As a result for claims 1-25 the allowability resides, at least in part, in the above-described limitations, in combination with the other elements of each of the claims, which has not been disclosed in or rendered obvious by the Prior Art.

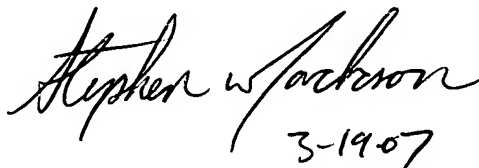
Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance".

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Luis E. Román whose telephone number is (571) 272 – 5527. The examiner can normally be reached on Mon – Fri from 7:15 AM to 3:45 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Sircus can be reached on (571) 272-2800 x 36. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from Patent Application Information Retrieval (PAIR) system.

Status information for unpublished applications is available through private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



3-19-07

STEPHEN W. JACKSON
PRIMARY EXAMINER

Luis E. Román
Patent Examiner
Art Unit 2836